

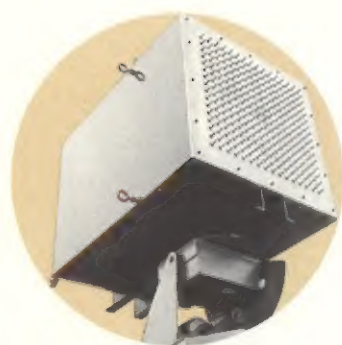
Teledyne, Inc.  
1962

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# TELEDYNE, INC.

ANNUAL REPORT FOR THE YEAR ENDED OCTOBER 31, 1962

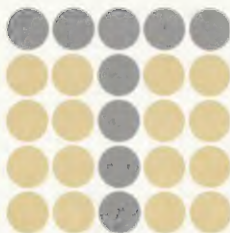




*Broadband multiple beam-forming array antenna designed for target discrimination in air defense applications.*

# TELEDYNE, INC.

THIRD  
QUARTERLY  
REPORT



*For The Nine  
Months Ended  
July 31, 1963*

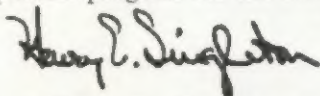
## *To Our Shareholders:*

Sales and earnings for the nine months ended July 31, 1963, were substantially higher than for corresponding prior periods. Sales reached \$14,339,786, compared to \$6,357,748 for the first nine months of last year. Net income increased to \$527,668, equivalent to 71 cents per share on the 743,479 shares of common stock outstanding, as compared to \$211,514 or 33 cents per share on the 646,967 shares outstanding a year ago.

Since our last quarterly report, acquisitions of Ordnance Specialties, Inc., Electro Development Company and Kiernan Optics have been completed. Ordnance Specialties gives Teledyne a production capability in the growing field of propellant-actuated devices, and will enable your company to take part in the expanding application of such devices in automatic control equipment. Electro Development manufactures slip ring assemblies and switches, a product line complementary to that of Teledyne Precision. These newly-added products will be sold through our existing electro-mechanical products sales organization. Kiernan Optics designs and manufactures precision optical components and optical assemblies used in such products as fire control and navigation systems. Combining this capability with our systems know-how will increase our ability to acquire large systems contracts which often include sophisticated electro-optical equipment.

A number of additional acquisitions are in process. In connection with the proposed acquisition of Sprague Engineering Corporation, stockholders will be asked to vote on the authorization of a new issue of preferred stock. You will receive a proxy statement regarding this in the near future.

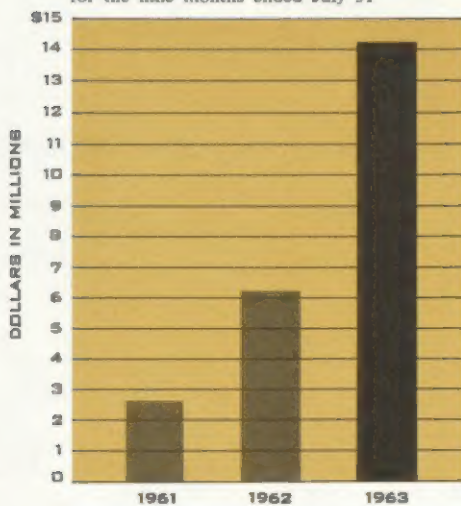
Teledyne recently was selected by the Navy as one of three firms to proceed with the program definition phase of the Integrated Helicopter Avionics System program which is expected ultimately to be a multi-million dollar effort. The program envisages use of advanced computer technology incorporating microelectronics wherever feasible. We believe our selection over several larger competitors was based on our outstanding technical proposal and we are looking forward to performing this important program for the Navy.



Henry E. Singleton  
President

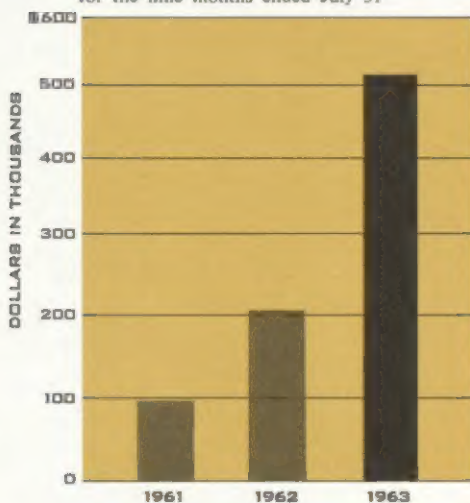
## SALES

for the nine months ended July 31



## EARNINGS

for the nine months ended July 31



## CONSOLIDATED STATEMENT OF INCOME

	For the Nine Months Ended July 31, 1963
Sales.....	\$14,339,786
Cost of sales.....	<u>11,275,870</u>
Gross profit.....	\$ 3,063,916
Selling and administrative expenses.....	<u>2,245,122</u>
Profit from operations.....	\$ 818,794
Interest expense.....	<u>240,780</u>
Net income before provision for Federal income taxes....	\$ 578,014
Provision for Federal income taxes (after reduction due to tax loss carry-forward).....	<u>50,346</u>
Net income for the period.....	\$ 527,668
Number of shares outstanding.....	743,479
Net income per share.....	71 cents

# TELEDYNE, INC.

12525 South Daphne Avenue

Hawthorne, California



# TELEDYNE, INC. AND SUBSIDIARIES

## HIGHLIGHTS

	1962	1961
Net Sales.....	10,438,367	4,491,431
Net Earnings.....	331,518	133,190
Shares of Capital Stock Outstanding.....	654,857	519,550
Net Earnings per Common Share.....	50¢	25¢
Working Capital.....	2,545,723	1,613,792
Net Worth.....	3,527,448	2,476,781
Net Worth per Common Share.....	5.39	4.77

*Net earnings include Federal income tax reductions due to carry forward of losses in subsidiary companies. Operations of Crittenden Transformer Works, Inc. are included only for the year ended October 31, 1962.*



*FADAC digital computer in production for use in the field Army's fire direction centers.*



*Phase-lock tracking receiver — used in tracking space vehicles.*



*Microelectronic navigation computer designed for carrier-based attack aircraft.*



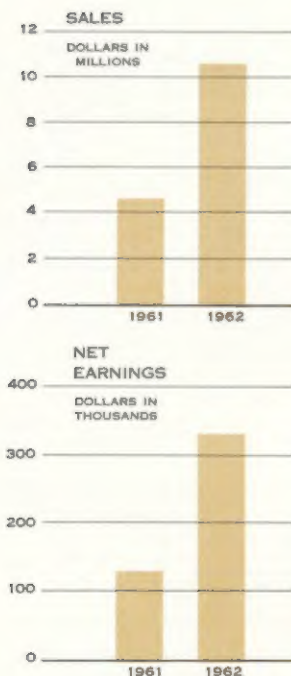


## *To Our Shareholders:*

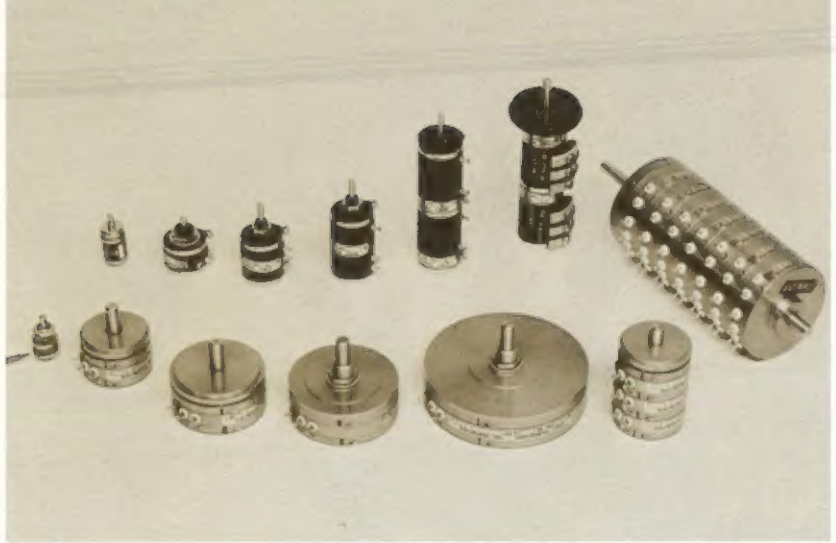
This annual report covers fiscal year 1962, your company's second year of operations. Sales for the year totalled \$10,438,367, up 132% from the \$4,491,431 of our first year. Earnings, net of applicable taxes, were \$331,518, a gain of 148% over the \$133,190 earned in 1961. Earnings per share advanced 100%, amounting to 50 cents per share on the 654,857 shares outstanding at year end.

The company now has approximately 1,500 shareholders, the majority of whom were added during the past year. It therefore seems appropriate at this time to review certain of the company's objectives and plans. From its inception the company has planned to become a major supplier, for military and industrial applications, of electronic end-item equipment and systems, and of the specialized electronic components that make up such systems. The various steps that have been taken to date in the company's expansion reflect the implementation of this plan.

*Systems and Equipment* — At the present time, the business of our Electronic Systems Division may be classified into three principal categories: (1) communications equipment, (2) computers and data systems, and (3) guidance and control systems. Our work in these three fields spans the range from very advanced theoretical and experimental studies and research, through development and production. For example, in the communications area we are developing and producing advanced monopulse tracking receivers for the National Aeronautics and Space Administration, which are used in the global minitrack network for the tracking of satellites and space probes. We are also producing R-390 communications receivers and ARC-73 transmitter-receivers for the Army. In computers and data systems we are producing FADAC computers for the Army's fire direction centers, and ASA-13A navigation computers for Navy anti-submarine patrol aircraft. For guidance and control applications we are developing high-acceleration inertial instruments for the Army Missile Command, and advanced accelerometers for the Air Force's Aeronautical Systems Division. Systems and equipment business during the fiscal year accounted for approximately two-thirds of our total sales volume.



*Ultra-precision potentiometers, representative of a broad line of electronic components presently being produced by Teledyne Precision, Inc.*



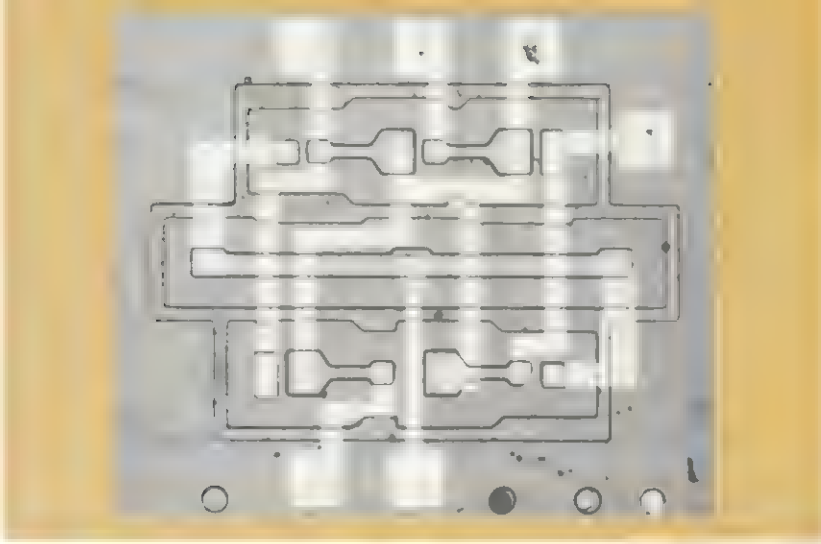
**Precision Components** — The company's business in components increased throughout the year, and accounted for approximately one-third of total sales. Our present component activities may be classified as follows: (1) electromechanical devices, developed and produced by Teledyne Precision, Inc. This product line has now been broadened to include relays, potentiometers, switches, quartz crystals, and temperature controlled component enclosures. Particularly noteworthy in this group is our new relay, which we have been developing for over a year and which was first offered for sale by the company late in the year. Packaged in a standard transistor case, it is believed to be one of the world's smallest and fastest relays; (2) hydraulic and pneumatic aircraft and missile fittings, a line of products added through the acquisition of Linair Engineering, one of the leading suppliers in this field; (3) transformers, an area in which our capability was considerably strengthened by the acquisition of Crittenden Transformer Works, Inc., an efficient design and manufacturing organization which has operated profitably under the same management for the past seventeen years; and (4) semiconductor devices and integrated circuits.



*Subminiature electro-mechanical relay which provides reliable high-speed operation in a size heretofore unattainable.*

During the year our work in semiconductor devices and integrated circuits was greatly broadened, with employment in the Electron Devices Division of our wholly-owned subsidiary, Amelco, Inc., increasing from about 50 people to approximately 200 by year-end. An important element facilitating this unusually rapid expansion has been the development and production of high performance silicon planar transistors for our own computers and data systems. These advanced transistors and additional related types have proven to be popular with other equipment manufacturers, and we are now producing and selling them in increasing quantity. Such devices as the 2N709 and 2N917, the fastest silicon planar transistors available, are now in production in our plant; and we recently introduced the FE-200 and FE-300 field effect transistors—very high input impedance active devices, with amplification and control characteristics much like those of pentode vacuum tubes. The availability of these fundamentally new units to the electronic systems engineer provides him with a valuable element of versatility in circuit





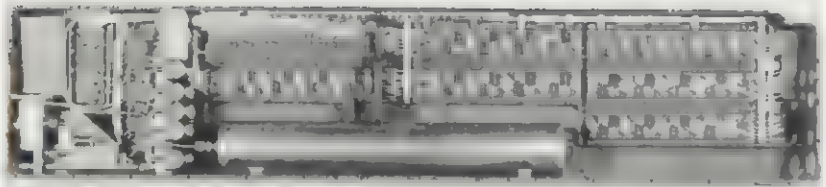
*Teledyne's leadership in microelectronic technology is exemplified in this photo-micrograph of a digital flip-flop, enlarged here to an area more than 2,500 times actual size. This integrated circuit performs the function normally performed by an assembly of six resistors and four transistors.*

and systems design, and permits easy and advantageous solutions to many otherwise troublesome circuit design problems. We believe that our achievement of successful volume production of silicon field effect transistors represents a major step forward in device technology, and that these field effect devices may some day be as widely used as conventional transistors are today.

Simultaneously with the development of new and improved semiconductor devices, the Electron Devices Division has continued a substantial program in the development of integrated circuits. In this program, we are developing processes and techniques for applying electronic solid state technology directly to the production of complete circuits rather than individual circuit elements. The utilization of these processes will result in a significant improvement in the methods now used for the manufacture of electronic equipment. Initially, we are carrying out the development of a variety of special custom circuits for our own systems division and for other equipment manufacturers. In addition, we have developed, and will shortly introduce to the market, a number of proprietary digital logic circuits such as gates and flip-flops. By providing greater reliability and reduced size and weight, together with a potential reduction in cost, such circuits as these are expected eventually to become widely used in the design and manufacture of digital computers and other digital equipment.

**Facilities** — To accommodate the increasing activities of our systems and components divisions, the company added substantially to its plant facilities during the year. We acquired a thirteen acre site in Hawthorne, California for the expansion of our Electronic Systems Division. We have 45,000 square feet in operation there now, and can add an additional 200,000 square feet as the occasion arises. For the expansion of the Electron Devices Division we acquired a fourteen acre site in Mountain View, California and are now constructing the initial 55,000 square foot building of a research, development and production complex at this location. Floor space now occupied by the company totals approximately 180,000 square feet.

*Subminiature digital subsystem for the S-17 orbiting solar observatory satellite. Component interconnections are spot welded to provide high reliability and long life.*



*Acquisitions* — In addition to the acquisition of Linair Engineering and Crittenden Transformer, by which we broadened our component product base, our activities in electronic systems was strengthened by the acquisition of American Systems Incorporated, since renamed Teledyne Systems Corporation. This acquisition brought to us increased capability in digital computer programming know-how; in electromagnetic systems technology, including advanced antennas applicable to a variety of communications systems; and in control instrumentation as applied to the detection of propellant and oxidizer vapors at missile sites. We also made an investment during the year in Micronetics, Inc., a San Diego based company newly-formed to exploit a capability in the generation, detection and utilization of extremely short pulses of microwave energy. We acquired approximately 20% of the stock of this company, and have an option to acquire the rest under specified conditions.

*Stock Options* — Some of our newer shareholders may be interested in the company's restricted stock option plan. The use of stock options to attract outstanding key personnel to our company has proven to be particularly effective. Without this ability it would have been extremely difficult, if not impossible, to have brought into the company so many highly qualified technical and management personnel in such a short period of time. The careful use of our option plan has been especially beneficial during the early stages of the company's growth. As the company gains size and recognition, the number of options needed to serve our purpose of course diminishes. Only a small number of options have been exercised, and at October 31, 1962, there were outstanding to key employees options to acquire 85,000 shares during the next five years for a total consideration of \$1,080,450. We believe that the number of shares remaining of the 150,000 originally reserved by the shareholders for stock options will be adequate to serve the company's needs for several years to come. None of the directors have stock options.

*Summary* — In summary, our second year of operations proceeded substantially in accordance with the company's original plan. Sales and profits were increased. Our proprietary product base was broadened in both systems and components. Industrial and commercial as well as government business was expanded. We are entering our third year with a record-high backlog in excess of \$12,000,000, and we look forward to the further development of Teledyne as a major industrial organization.

*Harry E. Singleton*  
President





THE YOUNG MAN  
WHO IS THE  
FUTURE OF THE  
NATION

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*Experimental antenna for ground Tacan navigation stations, shown during installation on the Teledyne pattern measurement range. This cylindrical phased array is designed to provide improved coverage over a greater volume of space*



*Field tests with the Teledyne vapor detector. Used at missile sites to monitor missile fuel and oxidizer vapor levels in the air, this unit is capable of detecting concentrations of as little as one part in a million*



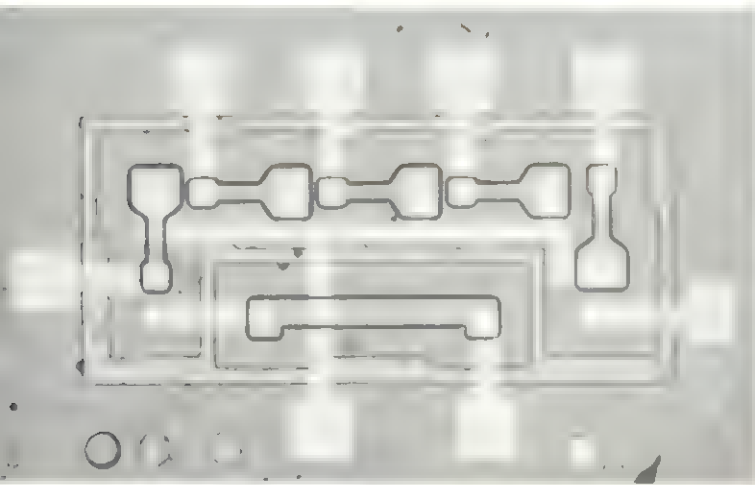
*Photolithography mask used in the production of integrated circuits. Design is transferred to mask by laser.*



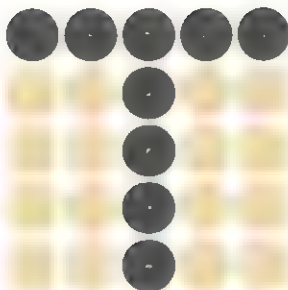
*Resistor and capacitor values from digital-to-analog converter in turntable control system are programmed into control. is one of many integrated circuits at Electron Devices Division.*



*Series of integrated circuits. Each unit is a separate circuit, but they are all interconnected.*



*Electronic package of a microelectronic integrated circuit. It was in production at Electron Devices Division. This size is about 1/16 by 5/16 inches. 6 resistors and 6 interconnecting wires. Approximate actual size.*



## ASSETS

### CURRENT ASSETS:

Cash .....	\$ 541,110
Receivables—	
Accounts receivable, less reserve of \$70,854.....	2,928,729
Reimbursable costs and fees under defense contracts.....	1,601,539
Inventories, at the lower of cost (first in, first out) or market, less progress billings of \$762,279.....	2,659,305
Prepaid expenses.....	161,364
Land held for resale (Note 5).....	128,426
Total current assets...	<u>\$ 8,020,473</u>

### PLANT AND EQUIPMENT, at cost (Note 5):

Land (\$1,450,696, including \$1,288,000 representing cost of land held for expansion) and buildings.....	\$2,133,637	
Less—Noncurrent portion of trust deed note payable (Note 3).....	1,530,000	
	<u>\$ 603,637</u>	
Equipment and improvements.....	1,842,776	
	<u>\$2,446,413</u>	
Less—Accumulated depreciation and amortization	735,281	1,711,132

### OTHER ASSETS:

Excess of cost of businesses acquired over equities in underlying book value at dates of acquisition (not being amortized).....	\$ 893,040	
Rent deposits, etc.....	144,090	
Investments.....	<u>75,025</u>	1,112,155
		<u>\$10,843,760</u>

*The accompanying notes are an integral part of this balance sheet.*



# TELEDYNE, INC. AND SUBSIDIARIES

## CONSOLIDATED BALANCE SHEET

OCTOBER 31, 1962

### LIABILITIES

#### CURRENT LIABILITIES:

Notes payable to bank.....	\$ 2,500,000
Current portion of long-term debt and trust deed note payable.....	715,000
Accounts payable.....	1,689,445
Accrued liabilities—	
Payroll.....	\$ 232,064
Taxes other than Federal income taxes .....	140,154
Other .....	198,087
Total current liabilities.....	\$ 5,474,750

LONG-TERM DEBT (Note 2)..... 1,841,562

#### CAPITAL STOCK AND SURPLUS:

Capital stock, \$1 par value—	
Authorized 1,500,000 shares	
Outstanding 654,857 shares (Note 4).....	\$ 654,857
Capital surplus.....	2,336,771
Earned surplus (Note 2).....	535,820
	3,527,448
	<u>\$10,843,760</u>

# TELEDYNE, INC.

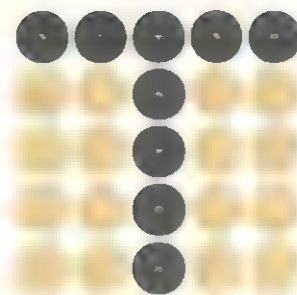
AND SUBSIDIARIES

## CONSOLIDATED STATEMENT OF SURPLUS

for the year ended October 31, 1962

	Capital Surplus	Earned Surplus
BALANCE, OCTOBER 31, 1961:		
Previously reported.....	\$1,829,787	\$127,444
Earned surplus carried forward as result of pooling of interests (Note 1).....	—	76,858
	<u>\$1,829,787</u>	<u>\$204,302</u>
ADD:		
Excess of fair value of capital stock issued in acquisition of businesses over par value thereof (Note 1).....	452,321	—
Difference between par value of capital stock issued and capital stock and capital surplus of subsidiary company included herein on a pooling of interests basis.....	50,007	—
Excess of sales price over par value of capital stock sold under stock option plan (Note 4).....	4,656	—
Net income for the year including Federal income tax reduction.....	—	331,518
BALANCE, OCTOBER 31, 1962.....	<u>\$2,336,771</u>	<u>\$535,820</u>

*The accompanying notes are an integral part of these statements.*



CONSOLIDATED STATEMENT OF INCOME  
for the year ended October 31, 1962

SALES.....	\$10,438,367
COST OF SALES.....	<u>8,542,976</u>
Gross profit.....	\$ 1,895,391
SELLING AND ADMINISTRATIVE EXPENSES.....	<u>1,433,308</u>
Profit from operations.....	\$ 462,083
INTEREST EXPENSE.....	<u>118,565</u>
Net income before provision for Federal income taxes.....	\$ 343,518
PROVISION FOR FEDERAL INCOME TAXES (after reduction of approximately \$175,000 due to carryforward of losses of acquired subsidiaries incurred prior to dates of acquisition).....	<u>12,000</u>
Net income including Federal income tax reduction.....	<u><u>\$ 331,518</u></u>

*The accompanying notes are an integral part of this statement.*

# TELEDYNE, INC. AND SUBSIDIARIES

## NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

OCTOBER 31, 1962

### 1. *Acquisitions and principles of consolidation—*

In January, 1962, the company acquired the business and assets, subject to liabilities, of Linair Engineering, Inc., in exchange for shares of its capital stock. The company also acquired all of the convertible preferred stock and substantially all of the common stock of American Systems Incorporated in March, 1962, for cash. The results of operations of these businesses since the dates of acquisition have been included in the accompanying consolidated statement of income. Subsequent to October 31, 1962, the name of American Systems Incorporated was changed to Teledyne Systems Corporation.

In October, 1962, the company exchanged shares of its capital stock for all of the outstanding stock of Crittenden Transformer Works, Inc. This transaction has been accounted for as a pooling of interests and the operations of Crittenden have been included in the consolidated statement of income for the full year.

The consolidated financial statements include the accounts of Teledyne, Inc. and all of its subsidiaries. All significant intercompany accounts and transactions have been eliminated in consolidation.

### 2. *Long-term debt—*

At October 31, 1962, long-term debt consisted of the following:

5½% bank note payable in quarterly installments with the balance of \$650,000 due January 31, 1965.....	\$1,500,000
6% note payable in annual installments to July, 1965, secured by land.....	286,562
Noninterest-bearing notes payable at various dates to October, 1965 .....	500,000
	<u>\$2,286,562</u>
Less—Current portion.....	445,000
	<u>\$1,841,562</u>

Under terms of a loan agreement with a bank, the company has agreed to maintain minimum amounts of consolidated net worth plus subordinated debt, working

capital, and a ratio of consolidated debt to net worth plus subordinated debt. These requirements were complied with as of October 31, 1962. The company has also agreed (1) to assign the proceeds of its defense production contracts to the bank as security for the bank loan, (2) to sell a minimum of \$500,000 in subordinated debentures which will be subordinate to bank borrowings and to apply the proceeds from such sale against the bank borrowings, and (3) not to declare or pay dividends except dividends payable in capital stock of the company.

### 3. *Trust deed note payable—*

The trust deed note payable is due in semi-annual installments to September 1, 1967, at which date the unpaid balance (\$900,000) is due. The note bears interest at 5 per cent and is secured by a deed of trust on land and buildings carried at a cost of \$1,837,344. Since the holder of the note can look only to the property securing it for satisfaction thereof, the unpaid balance (less the installments of \$270,000 due within one year) has been deducted from the cost of land and buildings on the accompanying consolidated balance sheet.

### 4. *Stock options—*

At October 31, 1962, 142,362 shares of capital stock were reserved for issuance to key employees under a restricted stock option plan. Options to purchase 85,000 of these shares at prices from \$1 to \$24 per share were outstanding at that date.

### 5. *Lease commitments—*

Certain facilities and equipment used by the companies (including equipment with a net book value of approximately \$965,000 which was sold by the companies and leased back during the year) are held under long-term lease agreements. Aggregate future rentals of approximately \$2,400,000 are payable under the terms of lease agreements which expire at various dates to 1977.

The company holds a parcel of land on which a building is being constructed by an outside party. Upon completion thereof, the land will be sold to the builder and the facility leased by the company.



ARTHUR ANDERSEN & CO.

1020 WEST THIRD STREET  
LOS ANGELES 17

To the Stockholders and Board of Directors,  
Teledyne, Inc.:

We have examined the consolidated balance sheet of TELEDYNE, INC. (a Delaware corporation) and subsidiaries as of October 31, 1962, and the related statements of income and surplus for the year then ended. Our examination was made in accordance with generally accepted auditing standards and accordingly included such tests of the accounting records and such other auditing procedures as we considered necessary in the circumstances.

In our opinion, the accompanying financial statements present fairly the consolidated financial position of Teledyne, Inc. and subsidiaries as of October 31, 1962, and the results of their operations for the year then ended, in conformity with generally accepted accounting principles applied on a basis consistent with that of the preceding year.

ARTHUR ANDERSEN & CO.

Los Angeles, California,  
January 11, 1963.

*Headquarters of Electronic Systems Division in Hawthorne.*



*Electronic Systems Division's engineering plant in Hawthorne.*



*Production facility of Electronic Systems Division in West Los Angeles.*



*Crittenden Transformer Division in Los Angeles.*







*Teledyne Precision's facility for the design and production of precision components.*



*Linair Engineering Division in Inglewood.*



*Existing plant of Electron Devices Division in Mountain View.*



*Additional plant of Electron Devices Division under construction in Mountain View.*

